

ABSTRACT

A noiseless circuit structure of a gas concentration measuring apparatus is provided. The gas concentration
5 measuring apparatus includes a gas sensor which has a solid electrolyte body. The solid electrolyte body has two electrodes affixed thereto and forms a pump cell which is actuated by application of voltage to the electrodes. The voltage has one of discrete levels contributing to addition of undesirable spiky peaks
10 to a pump cell current produced by the pump cell. The apparatus works to smooth or blur the voltage to be applied to the pump cell or the pump cell current, thereby eliminating the spiky peaks of the pump cell current.